Globalization and Stock Market Stability

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Abstract

The globalization of the world stock markets may be a blessing and enhance national economies, or may increase pricing volatility and trading instability, due to the fact that the irrational trading in one market may spill over to other markets as witnessed in the last two decades. Accordingly, this paper aims to discuss the issue of stock market globalization; it examines stock markets practices, and regulations for about fifty developed as well as emerging markets, and their movement towards globalization. It covers introduced practices including new types of shares as well sophisticated types of control measures adopted by exchanges to cope with stock market instability. The result shows that the majority of the world stock markets have responded to various aspects of the global environment; some have positive aspects such as the reducing cost of trading, increasing liquidity as well as, transparency, and protecting inventors' interests. However, on the other hand they *created new challenges reflected in instability, impairment of market efficiency, and market fragmentation. These negative aspects do not exist for all periods, but they materialize during steep price declines and unstable periods of trading. Thus, the study finds that the majority of the world stock markets adopted at least one or more of the control measures to cope with instability of stock trading, including price limits, margin requirements, and circuit trade rules.*

1. Introduction

The globalization of the world stock markets is the most significant development that has occurred during the last decade. Various factors contributed to this including: the advancement of technology and remote access which have been utilized in security trading, the emergence of new international financial institutions offering financial services regardless of geographical and jurisdictions, trends of liberalization and the removal of restrictions used to be imposed on foreign ownership, and the movement towards regional integration of that stock exchanges, clearing and settlements organizations, and other financial institutions. The globalization phenomenon may be blessing, since many experts believe that globalization may improve market efficiency, lower its risk due to the possibility of diversification, and use arbitrage in a relevant way. On the other hand, may increase pricing volatility and trading instability, due to the high correlation between leading - major- stock markets on other markets as well as to the fact that the irrational trading in one market may move to other markets as witnessed in the last two decades (Sabri, 2004, Sabri, 2002a, and Sabri 2002b).

2. **Methodology**

Accordingly, this paper aims to discuss the adverse impact of globalization on stock trading by examining about fifty stock exchange practices, laws, and regulations for developed as well as emerging markets. The study used a questionnaire sent to about fifty securities commissions' officials by emails, using the list of the International Organization of Securities Commissions (IOSCO). A total of 52% of selected exchanges responded to the questionnaire. The aim of questionnaire is to examine what new practices have been introduced concerning types of shares and practices as well as types of control measures adopted by the respected exchanges to cope with stock market instability.

Based on the analysis of responds of securities commissions, the research check all related laws of the respective countries were examined to verify and complete some answers supplied of the commissions' officials. This was necessary in cases of unclear as well as for incomplete answers. The rest of the paper will be organized as follows: the second section presents major globalization practices in the world stock markets as they have implemented in stock exchanges over the last decade. The next section presents the possible negative aspects of globalization on the stability of stock trading. The fourth section shows the control measures introduced to cope with stock market instability by the selected sample of stock exchanges, while the last section will conclude this study.

3. Major aspects of stock market globalization:

From an analysis of the present practices and the expected trends, it appears that the world's stock markets are heading rapidly toward globalization through two major changes; these are the liberalization of international stock trading rules, and the internationalizing of stock trading practices.

3.1: Liberalization of stock trading: The majority of the world stock exchanges have adopted regulatory changes in the last decade, most of which favor the liberalization of stock markets trading and the regulation of financial institutions. The liberalization of stock markets may take various forms, including: removing restrictions imposed on foreign ownership, attracting foreign investors to invest in the national stock exchanges and increasing the share of foreign trading in the stock markets to permit direct investments by foreign investors. However, this liberalization of world stock markets has materialized mostly through the following ways:

The number of countries that introduced changes in their investment laws and to encourage foreign investments including direct foreign investments has increased significantly; about 70 countries issued about 1641 regulatory changes favorable to foreign investments from 1991 to 2002 (UNCTAD, 2003). In addition, of the fifty-two emerging stock markets, thirty-five have removed the ceiling of ownership for listed stocks up to 100% of the total equities by the end of 1998. The other seventeen states have allowing non-residents to own in local stock markets partially, such as Brazil: 49%, Trinidad and Tobago: 30%, India 24%, Korea: 39%, Philippines: 40%, Taiwan: 30%, Thailand: 49%, Russia: 9%-25%, Ghana: 74, Jordan: 50%, Saudi Arabia 25%, Tunisia: 49.9%, and Zimbabwe: 40% (IFC, 1999). Indeed, most European countries have no foreign ownership restrictions, such as Austria, Denmark, Belgium, Luxemburg, Greece, Germany, Ireland, UK, Sweden, Netherlands, and Italy. In addition, the majority of the world's emerging and developed countries witnessed growth in bilateral, multilateral, and international investment agreements to encourage foreign investments and cross borders cash flows (UNCTAD, 2003).

Another new practice that has emerged over the last decade involves the legal status of stock exchanges. The legal entity of the stock exchange in the majority of the world stock markets has been changed in recent years. Most changes were introduced in the last ten years including their economic status, the profit target, owners, legal entity, work conditions, sources of revenues, place of trading, and other. Many of the world's stock exchanges went through a process of demutualization and privatization. The privatization of the world's stock exchanges started in Europe and is extending now to some Asian stock exchanges and other emerging markets. For example, the Stockholm Stock Exchange was the first to become demutualized in 1993, followed by the majority of European stock exchanges, and exchanges in Hong Kong, Singapore, and Toronto. In addition, the majority of these stock exchanges are now public companies and their shares are listed on their own stock exchanges; such as Australian (1998), Hong Kong (2000), Helsinki (2000), Singapore (2000), Deutsche (2001), Oslo (2002), Euronext (2002), and London (2001) (Aggrawal, 2002).

Finally, changes of the legal entity of stock exchanges are extending to the rest of the world. The annual report of the World Federation of Exchanges (WSE, 2001), indicated that there was a significant changes in the legal status of the world's stock exchanges; about 46% of the exchanges were profit making firms or non- profit organizations with insider ownership, while 37% were profit making - organizations with outsider ownership, and 17% were public firms. Accordingly, it can be concluded that the trend in legal entity of stock exchanges is shifting from public and non- profit-making organization, to private firms with insider owners, and from private companies with insider owners, to public companies. Eventually, the majority of the world stock exchanges will be public corporations owned by both insiders and outsiders if this trend continues.

Trends in the use of dual class shares have also increased thought the world's stock markets. Recently some countries that used to prevent foreigners from buying their national corporate shares are issuing a special class of shares that is designated for foreigners such as in China. This instrument liberates access to the stock markets from one side while keeps control by national stockholders continues on the other hand. The dual class of shares gives the world's stock markets the flexibility of opening up investments to international trading but with strict levels of control such as using limited voting rights (Sabri, 2005). Various stock commissions use dual class shares for voting purposes, residents- non residents, and bearer to register shares. The shareholders of dual stock assigned to less normal voting rights and bearer shares as well as non -promoters holders and foreigners' holders are considered as inferior holders; thus, their fast reactions of selling securities may impair the efficiency of stock markets and have an adverse effect on stock markets during unstable periods of trading. It is expected that the holders of inferior shares will be first to sell their equities as long as the other purposes of holding shares are not considered such as the management control of the firm. In addition, the gap between the prices of the different classes of a security will increase significantly, which may increase the price volatility for that security.

There is also, a new trend of permitting the issuance of no- par value shares as a substitute for the par value shares. Various countries have accepted the concept of issuing no-par value shares in the last decade. The par value share was the only possibility for the majority of the world's corporate jurisdictions for a long time. Examples of such jurisdictions that had introduced the no- par value concept along side the par value shares in the last decade are; France, Germany, Guernsey, Sate of Jersey. Other countries considering these issues such as Hong Kong and Taiwan, while Australia selected the no- par value share as sole alternative for new issues as found by this study. The issue of no- par value received a lot of attention in the last decade due to the process of converting the capital amounts of the European companies stated by the European national currencies into the Euro currency, which created various accounting problems during the redenomination process. In addition, using the no-par value concept may create various technical and legal problems, thus; prices are more volatile during instable trading periods.

3.2: Internationalization of stock markets: various new trading practices have been adapted by the world's stock markets in the last decade including the following:

Use of internet services is increasing; billions of dollars as expressed in traded value are channeled directly or indirectly through internet stock trading. In addition, the internet is gradually changing the direction and the mechanism of trading decisions of the world's stock markets. The trading decisions are now spreading all over the world, rather than being concentrated in and around the stock exchange. In the last five years, the number of investors including sellers and buyers using internet services has been increasing rapidly. For example, a NASDAQ report (2001) found that there were over 28 million on line brokerage accounts in 2001. In addition, a survey conducted in 2002 indicated that 31% of the European online consumers own shares, while one third of them researched online; that represents 10% of the European shareholders (IOSCO, 2003a). The effect of internet trading on stock market stability is not yet clear. Online stock trading is considered as more active, more speculative, and less profitable as reported by Barber and Odean (2002). The reaction of internet advisors, specialists and investors may be unpredictable during periods of stock market instability.

In addition to that, there is an increase in the share of foreign trading in the world's stock markets**.** The share of foreign trading in the world's stock trading used to be limited and immaterial. For example, Cooper and Kaplanis (1994) found that in 1987, 100% of equities in Sweden, 98% in US, 91% in Italy, 79% in the UK, 75%, in Germany, and 94% in Spain were owned by residents. However, this situation has changed rapidly, during the last decade.

Foreign trading increased between 1995 to 2002 by up to 1852% in the Johannesburg stock exchange, 638% in Germany, 481% in Australian stock exchanges. In addition its about 58% of the total traded value of the London stock exchange, and 24% of Stockholm stock exchange was conducted by non- residents (WFE, 2005). The share of foreign trading including foreign direct investment has increased significantly because of growing practices of using the GDR and ARD instruments in both secondary and international public offerings in both USA and European markets.

The practice of cross listing is the most significant phenomenon that creates linkages among stock exchanges. The number of dual listed firms has increased significantly during the last decade. Many leading corporations' shares are traded more in foreign stock exchanges than traded in their home exchanges. The majority of foreign firms listed on second stock exchange have to meet dual requirements; other firms that may not meet the second exchange's requirements use the so-called depository receipts as an alternative for cross listing. There are various possible ways of cross-listed firms including direct cross-listed or using alternative methods; cross-listing may be a second listed in another local stock exchange, or in other foreign exchanges, using one currency or different currencies.

If we look at the geographical spread of the cross-listed firms in the world's stock markets, we may conclude that these are mainly concentrated in the North American and the European stock markets, with few in Latin American, South African and some of Asian stock markets. For example, about 55 of listed firms originated in UK are listed at the same time in other European stock; 55 securities are in NASDAQ, and 46 in NYSE. (Pagano, et al., 2002). The practice of cross listing securities increases financial and economic ties and expands the association between different geographical regions (Sabri, 2002c) .On the other hand cross listing may have some disadvantages as it weakens the local stock exchanges and reducing their annual revenues. Other limitations may exist in certain conditions such as increasing the systemic risk in the home stock exchange and creating price fragmentation.

One of the newest developments in the world's stock markets is the adoption of what is known as an alternative trading system or the non- exchange trading system. It is an alternative trading method to the traditional stock exchange. The traditional stock exchanges are no longer the sole vehicle for stock trading, were the stock prices are determined. The new practice that uses electronic communication networks (ECNs) offers investors the opportunity to send their orders directly to the electronic system, which will match electronically, in a non- discretionary way set by the system operation. Trading outside the traditional stock exchanges may have various advantages. First, it may play a distinct role in the market and solve the conflict of interest problems that exist between brokers and dealers as reported by Macey and O'Hara (1999). Second, there is the benefit of offering a trading system round the clock. Third, it fits more with retail investors and allow them to trade anonymously which does not occurred in the traditional stock exchanges. Fourth, it offers the opportunity to trade with less cost under less regulatory environment and it may be considered as a complementary method to handle a part of the stock market trading in case of booming seasons of trading.

4. Negative aspects of Globalization:

The question arises here about the adverse impact of globalization on the stability of the stock market. It is clear from many empirical studies as well as the events of the last decade, that there may be an adverse effect, which may be synthesized as follows:

4.1: Adverse impact of liberalization: The liberalization of the world's stock markets may lead in certain circumstances to an increase in the volatility of prices. It may weaken the power of national authority to control and protect the national stock market activities during unstable conditions. The liberalization of the stock market increases the trading volume of stock markets, but may have various negative effects that may be reflected inn the stability of the world stock markets. The possible adverse effects of liberalization may be summarized as follows:

❖ It may harm the national economy because it is expected that liberalization of stock markets in countries with weaken currency may damage the economy due to negative equity flows. Torre et al. (2002) suggested that developing countries who are seeking financial globalization should have a strong currency or should not be fearful of floating their home currencies against other currencies and should have a strong institutional framework.

❖ It may increase the stock markets' volatility and volatility spillovers amongst stock markets that may harm the economies of emerging countries as reported by Levine and Zervos (1998); these authors found that stock markets have become larger, more liquid, more volatile, and more integrated as a result of liberalization of sixteen emerging stock markets. Lauridsen (1998) reported that financial liberalization contributed to the meltdown of financial crisis in Thailand. Kim and Rogers (1995) found that the stock volatility spillovers have increased since the liberalization of Korean stock exchange. Kawakatsu and Morey (1999) agreed with this view, they stated that liberalization does not seem to improve the efficiency of emerging stock markets. Liberalization also may lead to incomplete integration in majority of the developing countries. The liberalization of financial regulations may lead to incomplete harmonization and increase volatility of capital flows (World Bank, 2001).

❖ Liberalization means competition among financial systems from international financial institutions including international stock exchanges. This situation may put pressure on the local financial institutions, and thus lead to instability of local stock markets and other local financial systems. An IMF report (2000) concluded that emerging markets assets remain heavily dependent upon mature markets' developments and investors' risk tolerance.

❖ The increase in linkages provides some disadvantages; for example a mistake or a volatility surprise in one market may be transferred to other stock markets (King, 1990; and Jeong, 1999). Free capital flows and increasing linkages may transfer the volatility of inflation and exchange rates from one market to another as happened to the financial markets in Mexico during 1994 and the East Asian region during the years 1997-1998. A recent study found that there are significant positive increases from 1994 to 1998, in the degree of correlation between the majority of selected stock markets (Sabri, 2002a) which may increase the cross-markets volatility transmission phenomenon.

4.2: Adverse impact of Internationalization

The majority of new practices adapted by the world's stock markets may have serious adverse impact on the stock trading during unstable periods. Example of such disadvantages:

❖ The use of internet advice for of stock trading is supposed to increase the dissemination of information and thus improve the stock market efficiency. However, the investment websites advising activities may create a panic about certain securities when recommendations for selling are issued. Such recommendations being announced on the internet websites may intentionally or unintentionally impair the efficiency of stock markets. It has been found that the internet stock recommendations are mostly positive with a ratio of buy to sell compared to seven to one (Dewally, 2003). However, this conclusion may be different in case of stock market crises or during the unstable trading periods.

❖ The increase of the total of foreign trading value among the world's stock markets may have some disadvantages regarding stock market stability. Various studies blamed foreign speculators and the free flow of equity investments in the instability of stock markets in emerging countries. Fundamentals are not sufficient to protect a country or a financial market from the financial contagion spread by irrational trading. Foreign investors and mutual funds play a critical role in initiating financial contagious crises. For example, during the last decade, some negative political and economic changes in emerging countries lead to a significant cash outflow. For example, during the year 1998, there was a negative cash outflow of about US$ 18 billion from Asian emerging markets (IMF, 2000). Kaminsky et al.

(2001) concluded that the withdrawals by mutual funds from emerging markets during the 1997 crisis were large and consistent with the evidence on financial contagion.

❖ The high volatility of equity portfolio flows between stock markets creates unstable linkages. Accordingly, there is a serious criticism against the portfolio capital outflow from emerging markets, which is considered as a short-term rather than long term investment. For example, Grabel (1996) found that international portfolio investments have two negative impacts on developing economies; they increase potential risk and macroeconomic instability, which impose constraints on policy autonomy.

❖ Various studies have examined the impact of cross listings of firms in more than one exchange on the volatility of underlying stock prices. The majority of these empirical studies have indicated that the cross listing of firms may increase price volatility. For example, the high price volatility may come from reducing the domestic market liquidity, because the cross listing may divert order flow to the foreign markets which leads to a negative impact on demotic stock market (Domowitz at el., 1998; and Ramchand and Susmel, 1998). This negative aspect of cross listing and the role of international mutual funds may be related to what is known as a home bias practice which means that the majority of mutual funds and local individual investors hold a portfolio of a large share of national equities compared to foreign securities. The home bias concept is related to the fact that equity portfolios are concentrated in local markets and not in international foreign markets in spite of the benefit which may be gained from international diversification. Tesar, (1995) found that there is strong evidence of a home bias in national investment portfolios despite the potential gains from international diversifications.

❖ Using both the ATS system and the traditional stock exchange systems may lead to market fragmentations where the orders in both markets are not matched or interacted. Accordingly, this situation may impair the efficiency of stock markets and thus create instability for both stock exchange and non- stock exchange trading. For examples, authorizing and regulating alternative trading systems and cross border transactions are considered as the most risky factors compared to other changes. However, the argument against this phenomenon has not been settled yet, and some economists believe it is acceptable to have such a variety and both markets should not be consolidated, rather they should deal independently.

The most important factor in creating fragmentation is the cross listing securities, especially the listings over different jurisdictions. It occurred between the price behavior of a security traded in local and foreign stock exchanges, when there are no interactions or co-movement among the price discovery systems in both markets. The second major external factor, which creates market fragmentation, is trading a security using an alternative trading system besides the traditional stock exchange system. Market fragmentation which occurs in cross-listed firms might be more significant in case of trading in exchange and non-exchange venues in both local and foreign markets. Internal factors may also produce market fragmentation such as in the case of block trading and special deals, where a special price may be agreed upon outside the price discovery system. In addition, bearer shares may be traded out of any stock trading regulated systems by transferring certificates according to the prices that contractors agreed upon.

Finally, it may be concluded that the new practices of globalization among the world's stock markets may have negative impact on stock trading stability. This is supported by a long list of empirical studies and international reports, especially in the last two decades. This means that the efficiency of stock market concept many not apply to the trading periods of high return volatility and sharp falling of stock prices considering the new trends in liberalization, and internationalization of stock trading.

5. Control regulations of stock trading:

Due to the increasing correlation between regional price indices, and to avoid as for as possible, the spillover of high price volatility between world, regional and twin markets. The world's stock markets use different measures to control the price volatility, including price limits of ups and downs of stock prices' changes from the pervious day, margin requirements and circuit breakers. The aim of imposing such regulations is to freeze or stop stock trading when high or low price movements reach a stated level in one trading day. Interruption regulations may be imposed on a security, group of securities and the whole stock exchange market.

However, the question that arises is whether these preventive measures are sufficient to deal with an emergency in stock market trading. Various studies have reported that such preventive measures are not sufficient, and they only delay the rational price movements. For example, Chen (1993) examined the price limits regulations in Taiwan and reported that price limits have no significant impact on reducing price volatility. Kim and Limpaphayom (2000) found that high trading volume stocks hit price limits more frequently than lower trading volume stocks. Kupiec (1998) found that margin requirements cannot be used to manage market volatility, but they may reduce the open interest of future contracts. Kim (2001) found that price limits are made more restrictive, and stock market volatility is not lowered.

Finally, it can be concluded that controlling measures may be sufficient to deal with low or average stock volatility, but it may be difficult to cope with high price volatility or stock crises. This may be due to trading outside stock exchanges, especially for countries, which have bearer shares that are not controllable. However, in spite of the non- conclusive results of empirical studies, imposing such measures in order to control the high stock volatility may impair the efficiency of stock markets, especially, when such interruptions occur frequently. For example, the frequency of trading halt reached to 1145 halts in Canada and more than 500 times in Brazil, Malaysia and NASDAQ stock exchanges in the year 2001 (IOSCO, 2002).

6. Conclusion:

The international stock market witnessed significant changes during the last decade due to the world economic globalization. It now includes about 50,000 securities, thousands of brokers and dealers, and intermediate agencies, hundreds of million of stockholders with an annual trading value of about 39 trillion US dollars (S&P, 2003 and WFE, 2005). It reached a new level of maturity and development as expressed by various measures including: annual trading values, the turnover ratio, the numbers of listed companies and securities, and number of traded products, derivatives, indexed products and indexed funds, which make stock market more sophisticated and volatile. Moreover, there is a significant change in the mechanism of stock trading due to the advancement in technology, communications, and asset management industry that changed the major features of stock markets. Finally, the phenomenon of globalization is more expanding and going in depth in the world stock markets, but it is still far from being a harmonized unified market.

The new incorporated practices in the world stock markets may have significant positive aspects such as reducing trading cost and transactions, increasing liquidity, increasing transparency, and increasing information sharing between concerned parties. But, on the other side have brought negative aspects including the impairment of market efficiency, and market fragmentation, adverse effects of new legal changes, and adverse effects of new introduced practices. However, these negative aspects do not exist in all periods of stock trading, but they may be materialized and have adverse impact during periods of deep falling prices and unstable periods of trading. Accordingly, and to avoid the adverse affects that might accompany the world globalization, several regulations, and measures need to be adopted in order to keep the world markets work in relevant environment. The relevant environment of the world stock markets includes: low cost of trading and transactions, high level of liquidity and transparency, protecting inventors' interests and other related parties' interests, relevant level of efficiency with less control measures and formal interruptions and the most important stability of stock trading with moderate level of volatility and risk.

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